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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,761	04/02/2004	Ivan E. Sutherland	SUN-P9702	1135
22835	7590	11/08/2004	EXAMINER	
PARK, VAUGHAN & FLEMING LLP 508 SECOND STREET SUITE 201 DAVIS, CA 95616			LAM, TUAN THIEU	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/816,761

Applicant(s)

SUTHERLAND ET AL.

Examiner

Tuan T. Lam

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-10 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 4-7, 11-14 and 18-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3, 8-10 and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones, Jr. (USP 6,788,122). Figure 8 of Jones, Jr. shows an apparatus for latching and amplifying a capacitively coupled inter-chip communication signal (Din) comprising receiving an input signal (Din) on a capacitive receiver pad (input pad) from a capacitive transmitter pad (the input signal is being transmitted to the input pad of the receiver from a transmitter pad), feeding the input signal through an inverter (M10, M11) to produce an output signal (signal at node N3), feeding the output signal through a weakened inverter (M13, M14 having width smaller than the transistors M10 and M11) to produce a feedback signal (signal at node N2), feeding the feedback signal back into the input of the inverter so as to form a latch for the input signal between the inverter and the weakened inverter, wherein the weaken inverter is biased to produce the feedback signal that swing between a high bias voltage (VCC) and a low bias voltage (PDVSS), wherein the VCC (3.3v) is higher than the switching threshold of the inverter (the threshold voltage of the transistor M10 or M11 is around 0.7v), and the low bias voltage PDVSS = Vss (negative 5v) - V threshold voltage of the transistor M23 is less than the switching threshold of the inverter, since, Jones, Jr.'s reference having a similar structure as claimed

Art Unit: 2816

therefore, it is capable of providing the feedback signal causes the input signal to reside within a narrow voltage range near the switching threshold of the inverter, thereby making the inverter sensitive to small transitions in the input signal received on the capacitive receiver pad as called for in claims 1, 8 and 15.

Regarding claims 2, 9 and 16, the amplification stage is seen as inverter comprising transistors M16 and M17 of figure 8.

Regarding claims 3, 10 and 17, the high voltage Vic is generated from a bias generator (power supply generator), the low bias PDVSS is generated by the voltage generator (transistor M23).

***Allowable Subject Matter***

2. Claims 4-7, 11-14 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

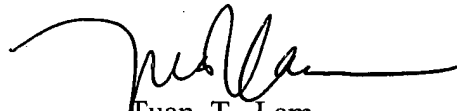
3. The following is a statement of reasons for the indication of allowable subject matter: Jones, Jar fails to teach or fairly suggest mechanism for adjusting VH and VL as called for in claims 4, 11 and 18, RC time constant for the feedback signal as called for in claims 7, 14 and 21.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Lam whose telephone number is 571-272-1744. The examiner can normally be reached on Monday to Friday (7:30 am to 6:00pm).

Art Unit: 2816

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY P CALLAHAN can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan T. Lam  
Primary Examiner  
Art Unit 2816

11/03/2004